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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,719	07/15/2003	Michael I. Thompson	QNI024.US	7769
22145 7590 12/28/2007 KLEIN, O'NEILL & SINGH, LLP 43 CORPORATE PARK SUITE 204 IRVINE, CA 92606			EXAMINER SMITH, MARCUS	
			ART UNIT 2619	PAPER NUMBER
			MAIL DATE 12/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/619,719

Applicant(s)

THOMPSON, MICHAEL I.

Examiner

Marcus R. Smith

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/29/03, 5/27/05, 8/21/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, and 14-18 are rejected under 35 U.S.C. 102 (e) as being anticipated by Basso et al. (US 7,065,086).

with regard to claim 1 (figures 9 and 10),

A method for processing IP datagrams (datagrams has both the IP header and TCP header, see figure 2, column 3, lines 5-15) using an outbound processing state machine in an outbound processor, wherein the IP datagrams are generated by a host system, comprising:

creating an input/output control block ("IOCB") (PCCB see figure 9) with plural host memory addresses that define host data to be sent (column 9, lines 1-15) and a host memory address of a network control block ("NCB") (routing function, 1008 see figure 10) used to build network protocol headers (column 16, lines 15-30), wherein the host sends the IOCB to the outbound processor (XMIT, 1010: column 16, lines 29-35).

with regard to claim 2,

The method of Claim 1, wherein the outbound processor reads the NCB from host memory and creates an IP and MAC level protocol header(s) for a data packet(s) used to send the IP data (column 16, lines 30-35: the examiner views as reading the destination ID from the PCB to forward the fragments as method creating the headers for the packet).

with regard to claim 3,

The method of Claim 1, wherein if a datagram fits into an IP packet, the outbound processor builds headers to send the datagram and then uses the plural host memory addresses defining the host data to read the data from the host, places the data into the packet and sends the packet (step 514: column 9, lines 55-63)

with regard to claim 4,

The method of Claim 1, wherein if a datagram is greater than a certain size (step 706), the outbound processor generates packets with fragments of the datagram using the NCB information to build headers (step 710) and then uses the plural host memory addresses defining the host data to read the data from the host, places the fragments of the datagram into each packet and sends the packets (forwarding FGT column 13, lines 40-45).

with regard to claim 5,

The method of Claim 4, wherein fragment flags indicate which particular fragment is being sent at any given time (column 14, lines 49-55).

with regard to claim 14 (figures 9 and 10),

A method for processing fragmented IP datagrams received from a network, comprising:

receiving the IP fragments into buffers (fragment queue) in a local memory (column 15, lines 1-10);

linking the IP fragment to a reassembly list for a particular IP datagram (column 15, lines 13-31); and

when all fragments are present, sending the complete datagram to TCP or a host for additional processing (column 16, lines 28-35).

with regard to claim 15 (figure 5),

The method of Claim 14, wherein if the IP fragment is the first fragment received for a datagram, a new reassembly list is created (step 524: column 10, lines 15-25).

with regard to claim 16,

The method of Claim 15, wherein after a new reassembly list is created, a timer is started to ensure the reassembly is completed in a certain amount of time (step 528, lines 40-47) .

with regard to claim 17 (see figure 6),

The method of Claim 14, wherein if the IP fragment is not the first fragment received for a datagram and is in order with the fragments already on the list, the fragment is added to the end of the list (step 618 to step 622: column 12, lines 40-47).

with regard to claim 18,

The method of Claim 14, wherein if the IP fragment is not the first fragment received for a datagram and is out of order with the fragments already on the list, the

fragment is inserted into the reassembly list as indicated by its IP offset (column 15, lines 23-31).

3. Claims 6-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Bilic et al. (US 7,050,437).

with regard to claim 6 (figures 2),

A method for processing TCP data packets generated by a host system using an outbound processing state machine in an outbound processor, comprising:

creating an input/output control block ("IOCB") with plural host memory addresses that define the host data to be sent (column 8, lines 1-15 assign a new entry in reassembly time) and a memory address of a network control block ("NCB") used to build network protocol headers, wherein the host sends the IOCB to the outbound processor (column 6, lines 40-50).

verifying if a TCP window is open (step 56: column 7, lines 33-40);

building TCP/IP/MAC headers (step 88: column 9, lines 16-30); and

sending the data packet(s) (step 86: column 9, lines 5-15).

with regard to claim 7,

The method of Claim 6, wherein the outbound processor reads the NCB into a local memory for creating the network protocol headers (step 102: column 10, lines 7-16).

with regard to claim 8,

The method of Claim 6, wherein the outbound processor builds TCP headers which includes setting a source and destination port numbers, TCP sequence numbers,

and other flags that indicate a type of packet, TCP header length and window size (It is well known that the TCP header includes everything above).

with regard to claim 9,

The method of Claim 6, wherein the outbound processor reads host data, appends the host data to a TCP header and calculates a TCP checksum while transferring the data (column 8, lines 48-55).

with regard to claim 10,

The method of Claim 6, wherein the outbound processor inserts a calculated checksum into a previously built TCP header and then sends the packet (column 8, lines 48-55).

with regard to claim 11,

The method of Claim 6, further comprising:

linking the NCB to a re-transmission timer list (step 64: column 8, lines 7-13);

updating the NCB with a last sequence number of the data transmitted (step 68: column 8, lines 28-35);

linking an original IOCB to the NCB, as a delayed request, in case all the data was not transmitted due to a window closing or if a re-transmission is necessary (step 84: column 9, lines 4-11); and

storing the NCB waiting for an Acknowledgement (step 72: column 8, lines 45-50).

with regard to claim 12,

A method for processing a TCP data transmit request after a TCP window is closed and then reopened by the reception of an acknowledgement (ACK) packet using an outbound processor, comprising:

reading a network control block (NCB) into a local memory (column 6, lines 55-63);

reading a delayed request (IOCB) linked to the NCB (step 84: column 9, lines 4-11);

verifying if a TCP window is open (step 56: column 7, lines 33-40);

building TCP/IP/MAC headers (step 88: column 9, lines 16-30); and

sending the data packet(s) (step 86: column 9, lines 5-15).

with regard to claim 13,

The method of Claim 12, wherein the outbound processor determines if a requested data transfer has been completed and generates an outbound TCP completion message (step 72: column 8, lines 45-50).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus R. Smith whose telephone number is 571 270 1096. The examiner can normally be reached on Mon-Fri. 7:30 am - 5:00 pm every other Friday.

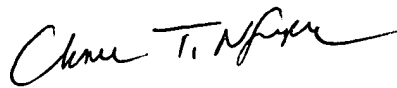
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 12/20/07


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